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l s	INFORMATION DISCLOSUR STATEMENT BY APPLICAN		APPLICANT	First Named Inventor	Ge Wang
				Art Unit	3737
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			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A*	US-6,216,027	04-10-2001	Willis et al.	
	B*	US-5,350,377	09-27-1994	Winston et al.	
	C*	US-4,611,600	09-16-1986	Cohen	
	D*	US-2007/0093700- A1	04-26-2007	Wang et al.	
	E*	US-2004/0092829- A1	05-13-2004	Furnish et al.	
	F*	US-2004/0015062- A1	01-22-2004	Ntziachristos et al.	
	G*	US-20030191398-A1	10-09-2003	Motz et al.	
	H*	US-2003/0120150- A1	06-26-2003	Govari	
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	FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,			
Initials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages Or Relevant Figures Appear	T ⁶		
	1	WO-2004/081865-A2	09-23-2004	Univ Iowa Res Found et al.				

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Sheet	Sheet 2		8	Attorney Docket Number	21087.0026U2	

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	J	Amirav, I., Kramer, S. S., Grunstein, M. M., and E.A. Hoffman, "Assessment of methacholine-induced airway constriction by high resolution cine computed tomography (HRCCT)," J. Applied Physiology, 1993, pp. 2239-2250, Vol. 75(5).	
	K	J. Beuthan, et al., "Optical molecular imaging: Overview and technological aspects," Med. Laser Appl., 2002, pp. 25-30, Vol. 17.	
	L	S. Bhaumik, and S. S. Gambhir, "Optical imaging of Renilla luciferase reporter gene expression in living mice," Proc. Natl. Acad. Sci., 2002, pp. 377-382, Vol. 99(1), USA.	
	М	D. A. Boas, "Diffuse Photon Probes of Structural and Dynamical Properties of Turbid Media: Theory and Biomedical Applications," 1996, Massachusetts General Hospital, Charlestown, MA, Harvard University.	
	N	D. A. Boas, et al., "The accuracy of near infrared spectroscopy and imaging during focal changes in cerebral hemodynamics," Neuroimage, 2001, pp. 76-90, Vol. 13(1).	
	0	C. Bremer, et al., "Optical-based molecular imaging: contrast agents and potential medical applications," Eur. Radiol., 2003, pp. 231-243, Vol. 13.	
	Р	I. Bronstein, et al., "Chemiluminescent and bioluminescent reporter gene assays," Analytical. Biochemistry., 1994, pp. 169-181, Vol. 219(2).	
	Q	T. F. Budinger, T. F., D. A. Benaron, et al., "Imaging transgenic animals," Annu. Rev. Biomed. Eng., 1999, pp. 611-648, Vol. 1.	
	R	WF. Cheong, et al., "A review of the optical properties of biological tissues," IEEE Journal of Quantum Electronics, 1990, pp. 2166 - 2185, Vol. 26.	
	s	C. H. Contag, et al., "Use of reporter genes for optical measurements of neoplastic disease in vivo," Neoplasia, 2000, pp. 41-52, Vol. 2(1-2).	

Examiner	Date	
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	NFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) 3 of 8		Art Unit	3737		
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	Т	C. H. Contag, et al., "Advances in in vivo bioluminescence imaging of gene expression," Annual. Rev. Biomed. Eng., 2000, pp. 235-260, Vol. 4.	
	U	S. M. Graham, et al., "Preoperative assessment of obstruction with computed tomography image analysis," Am. J. Otolaryngol., 2000, pp 263-270, Vol. 21(4).	
	٧	J. Hardy, et al., "Bioluminescence imaging of lymphocyte trafficking in vivo," Experimental. Hematology, 2001, pp. 1353-1360, Vol. 129(12).	
	w	R. C. Haskell, et al., "Boundary conditions for the diffusion equation in radiative transfer," J. Opt. Soc. Am. A, 1994, pp. 2727 - 2741, vol. 11(10).	
	X	J. W. Hastings, "Chemistries and colors of bioluminescent reactions: a review," Gene., 1996, pp. 5-11, Vol. 73.	
	Υ	M. Jiang and G. Wang, "Convergence Studies on Iterative algorithms for image reconstruction," IEEE Trans. on Medical Imaging, 2002, pp. 569-579, Vol. 22(5).	
	z	M. Jiang and G. Wang, "Development of Iterative Algorithms for Image Reconstruction," Journal of X-Ray Science and Technology, 2002, pp.77-86, Vol. 10.	
	AA	A. D. Kim et al., "Light propagation in biological tissue," J. Opt. Soc. Am. A, 2003, pp. 92 - 98, Vol. 20(1).	
	АВ	W. F. Kolbe and B. T. Turko, "Recovery of very low intensity CCD images from noise," IEEE Trans. Nuclear Science, 1989, pp. 731-733, Vol. 36(1).	
	AC	Liu, Y., H. Liu, et al., "Half-scan cone-beam CT fluoroscopy with multiple x-ray sources," Med. Phys., 2001, pp. 1466-1471, Vol. 28(7).	

Examiner	Date	
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	AD	V. Ntziachristos, et al., "Fluorescence molecular tomography resolves protease activity in vivo," Nature Medicine, 2002, pp. 757 - 760, Vol. 8(7).	
	AE	V. Ntziachristos, et al. "Concurrent MRI and diffuse optical tomography of breast aRer indocyanine green enhancement," Proc. Natl. Acad. Sci. U. S. A., 2000, pp. 2767-2772, Vol. 97(6).	
-	AF	V. Ntziachristos, et al., "Diffuse optical tomography of highly heterogeneous media," IEEE Trans. Med. Imaging, 2001, pp. 470-478, Vol. 20(6).	
	AG	M. O'Leary, "Imaging with Diffuse Photon Density Waves," 1996. Massachusetts General Hospital. Charlestown, MA, Harvard University.	
	АН	B. W. Pogue, et al., "Initial assessment of a simple system for frequency domain diffuse optical tomography," Phys. Med. Biol., 1995, pp. 1709-1729, Vol. 140(10).	
	Al	A. Rehemtulla, et al., "Rapid and quantitative assessment of cancer treatment response using in vivo bioluminescence imaging," Neoplasia, 2000, pp 491-495, Vol. 2(6).	
	AJ	B. W. Rice, et al., "In vivo imaging of light-emitting probes," J. Biomed. Opt., 2001, pp. 432 - 440, Vol. 6(4).	
	AK	L. A. Shepp and Y. Vardi, "Maximum likelihood restoration for emission tomography," IEEE Trans. Med. Imaging, 1982, pp. 113-122, Vol. 1.	
	AL	J. Tanifuji and M. Hijikata., "Finite difference time domain (FDTD) analysis of optical pulse responses in biological tissues for spectroscopic diffused optical tomography," IEEE Trans. Med. Imaging, 2002, pp. 181-184, Vol. 21(2).	
	AM	U. Utzinger, et al., "Fiber optic probes for biomedical optical spectroscopy," Journal Of Biomedical Optics, 2003, pp. 121-147, Vol. 8(1).	

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	AN	G. Wang and P. C. Cheng, "Feldkamp-type cone-beam reconstruction: Revisited," Zoological Studies, 1995, pp. 159-161, Vol. 34(S).	
	AO	G. Wang, et al., "Guest editorial: Multi-row-detector and cone-beam spiral/helical CT," IEEE Trans. Medical Imaging, 2000, pp. 817-821, Vol. 19.	
	AP	G. Wang and M. W. Vannier, et al., "Fast iterative algorithm for metal artifact reduction in X-ray CT,". Acad. Radiol., 2000, pp. 607-614, Vol. 7.	
	AQ	G. Wang, et al., "Error analysis on the generalized Feldkamp cone-beam computed tomography algorithm," Scanning, 1995, pp. 361-370, Vol. 17.	
	AR	Wang G., et al., "A Study on the section sensitivity profile in multi-row-detector spiral CT," Journal of X-Ray Science and Technology, 2003, pp. 1-11, Vol. 11.	
	AS	G. Wang, et al., "An iterative algorithm for X-ray CT fluoroscopy," IEEE Transactions on Medical Imaging, 1998, pp. 853-856, Vol. 17.	
	АТ	G. Wang, et al., "Temporal bone volumetric image deblurring in spiral CT," Academic Radiology,, 1995, pp. 888-895, Vol. 2.	
	AU	Wang G., et al., "Iterative deblurring for CT metal artifact reduction," IEEE Trans. on Medical Imaging, 1996, pp. 657-664, Vol. 15.	
	AV	G. Wang, et al., "Local computed tomography via iterative deblurring," Scanning, 1996, pp. 582-588, Vol. 18.	
	AW	Wang G., Vannier M. W., "Micro-CT scanners for biomedical applications: an overview," Advanced Imaging, 2001, pp. 18,22-27, Vol. 16., www.advancedimagingmag.com.	

Examiner	Date	
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	AX	G. Wang, et al. "Cone-beam X-ray tomographic and stereo-imaging," Biomedical Engineering-Applications, Basis & Communications, 1996, pp. 261-271, Vol. 8.	
	AY	Wang, G., Lin TH, et al., "A general cone-beam reconstruction algorithm," IEEE Trans. on Medical Imaging, 1993, pp. 486-496, Vol. 13.	
	AZ	S. Wood, et al., "Measurement of Three-Dimensional Lung Tree Structures Using Computed Tomography,". J. Appl. Physiol., 1995, pp. 1687-1697, Vol. 79(5).	
	ва	S. Zhao and G. Wang, "Feldkamp-type cone-beam tomography in the wavelet framework," IEEE Trans. Med. Imaging, 2000, pp. 922-929, Vol. 19(9).	
	вв	C. H. Contag et al., "It's not just about anatomy: in vivo bioluminescence imaging as an eyepiece into biology." J. Magn. Reson. Imaging, 2002, pp. 378-387, Vol. 16(4).	
	вс	P. R. Contag et al., "Whole-animal cellular and molecular imaging to accelerate drug development," Drug Discovery. Today, 2002, pp. 555-562, Vol. 7(10).	
	BD	M. Defrise, et al., "A solution to the long-object problem in helical cone-beam tomography," Phys. Med. Biol., 2000, pp. 623-643, Vol. 45(3).	
	BE	D. Farkas, et al., "Applications of spectral imaging: Detection and analysis of human melanoma and its precursors," Pigment Cell. Res., 2001, pp. 2-8, Vol. 14(1).	
	BF	P. Grenier, et al. "High-resolution computed tomography of the airways." J. Thoracic Imag., 1993, pp. 213-229, Vol. 8(3).	
	ВG	A. H. Hielscher et al., "Near-infrared diffuse optical tomography," Disease. Markers, 2002, pp. 313-337, Vol. 18(5-6).	

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	вн	Hoffman, E. A., et al., "VIDA: An environment for multidimensional image display and analysis," SPIE Biomedical Image Processing and Three-Dimensional Microscopy, San Jose, CA. Bellingham, Wa, SPIE, 1992, pp. 694-711, Vol. 1660.	
	ВІ	M. J. Holboke, et al., "Three-dimensional diffuse optical mammography with ultrasound localization in a human subject," J. Biomed. Opt., 2000, pp. 237-247, Vol. 5(2).	
	BJ	B. Li, et al., "3-D inter-subject warping and registration of pulmonary CT images for a human lung model," Proc. SPIE Medical Imaging 2002: Physiology and Function from Multidimensional Images, San Diego, CA., 2002, pp. 324-335, Vol. 4683.	
	вк	J. M. Reinhardt and E. A. Hoffman, "Quantitative pulmonary imaging: Spatial and temporal considerations in HRCT," Acad. Radiol., 1998, pp. 539-546, Vol. 5(8).	
	BL	B. D. Ross et al., "Magnetic resonance imaging in cancer research," European. Journal. Of Cancer, 2002, pp. 2147-2156, Vol. 38(16).	
	ВМ	A. J. Sherbondy, et al., "Virtual Bronchoscopy Approach for Combining 3D CT and Endoscopic Video," SPIE Medical Imaging 2000: Physiology and Function from Multidimensional Images, 2000, pp. 104-116, Vol. 3978.	
	BN	K. Tajik et al, "Subsecond multisection CT of regional pulmonary ventilation," Acad. Radiol., 2002, pp. 130-146, Vol. 9(2).	
	во	G. Wang, et al., "Scanning cone-beam reconstruction algorithms for x-ray microtomography," Proc. SPIE Scanning Microscopy Intrumentation, 1991, pp. 99-112, Vol. 1556.	
	ВР	G. Wang, et al., "Cone-beam reconstruction for micro-CT," The 2002 IEEE International Symposium on Biomedical Imaging, Washington DC, 2002, pp. 384-387.	
	BQ	L. Zhang and J. Reinhardt, "Detection of Lung Lobar Fissures using Fuzzy Logic," Medical Imaging 1999: Physiology and function from multidimensional images, San Diego, CA, Proc. SPIE, 1999, pp. 188-199, Vol. 3660.	

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	BR	Amendment entered with Filing of RCE filed 12-22-2010 for U.S. Application No. 11/444,282, filed 5-31-2006 (Inventors: - Wang et al.)	
	BS	Final Rejection issued 9-28-2010 for U.S. Application No. 11/444,282, filed 5-31-2006 (Inventors: - Wang et al.)	
	вт	Response to Non-Final Action filed 3-25-2010 for U.S. Application No. 11/444,282, filed 5-31-2006 (Inventors: - Wang et al.)	
	BU	Non-Final Rejection issued 10-26-2009 for U.S. Application No. 11/444,282, filed 5-31-2006 (Inventors: - Wang et al.)	
	ВV	Response to Election/Restriction filed 7-29-2009 for U.S. Application No. 11/444,282, filed 5-31-2006 (Inventors: Wang et al.)	
	ВW	Requirement for Restriction/Election issued 3-18-2009 for U.S. Application No. 11/444,282, filed 5-31-2006 (Inventors: - Wang et al.)	
	вх	International Preliminary Report on Patentability issued 9-16-2005 for Intl. App. No. PCT/US04/006360, filed 3-2-2004 (Applicant - University of Iowa Research Foundation; Inventors: Wang et al)	
	BY	International Search Report issued 5-20-2005 in Intl. App. No. PCT/US04/006360, filed 3-2-2004 (Applicant: University of Iowa Research Foundation; Inventors: Wang et al)	
	BZ	Written Opinion issued 5-20-2005 in Intl. App. No. PCT/US04/006360, filed 3-2-2004 (Applicant: University of Iowa Research Foundation; Inventors: Wang et al)	

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